

WHAT IS CLAIMED IS:

1. A semiconductor device, comprising:
a plurality of semiconductor chips mounted on a substrate;
5 an insulation film provided on said substrate, wherein said plurality of semiconductor chips are incrustated in said insulation film; and
wiring provided on said insulation film, wherein said wiring is connected to said plurality of semiconductor chips through a connection hole formed on said insulation film.
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2. The semiconductor device according to claim 1, further comprising
an upper layer insulation film provided on said insulation film,
wherein said upper layer insulation film covers said wiring; and
an electrode provided on said upper layer insulation film, wherein said
15 electrode is connected to said wiring through a connection hole formed on said upper layer insulation film.
3. The semiconductor device according to claim 1, wherein
said wiring is arranged so that a circuit included in a semiconductor
20 chip among said plurality of semiconductor chips is a shared circuit, shared with another semiconductor chip of said plurality of semiconductor chips.
4. The semiconductor device according to claim 3, wherein
said shared circuit is an input-output interface circuit for an external
25 equipment.
5. The semiconductor device according to claim 3, wherein said shared circuit is a power supply circuit.
- 30 6. The semiconductor device according to claim 3, wherein said shared circuit is an electrostatic protection circuit.

7. A semiconductor device, comprising:

a plurality of semiconductor chips;

an insulation layer supporting said plurality of semiconductor chips,
wherein a surface of said plurality of semiconductor chips is incrustated in
5 said insulation layer and another surface of said plurality of semiconductor
chips are exposed; and

wiring provided on said insulation layer, wherein said wiring is
connected to each semiconductor chip of said plurality of semiconductor
chips through a connection hole formed on said insulation layer.

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8. The semiconductor device according to claim 7, further comprising

an upper layer insulation film provided on said insulation layer,
wherein said upper layer insulation film covers said wiring; and

an electrode provided on said upper layer insulation film, wherein said
15 electrode is connected to said wiring through a connection hole formed on
said upper layer insulation film.

9. The semiconductor device according to claim 7, wherein

said wiring is arranged so that a circuit included in a semiconductor
20 chip among said plurality of semiconductor chips is a shared circuit, shared
with another semiconductor chip of said plurality of semiconductor chips.

10. The semiconductor device according to claim 9, wherein said shared
circuit is an input-output interface circuit for an external equipment.

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11. The semiconductor device according to claim 9, wherein said shared
circuit is a power supply circuit.

12. The semiconductor device according to claim 9, wherein said shared
30 circuit is an electrostatic protection circuit.

13. A semiconductor device, comprising a plurality of semiconductor

chips mounted on a substrate, wherein a circuit of a semiconductor chip among said plurality of semiconductor chips is a shared circuit, shared with another semiconductor chip of said plurality of semiconductor chips.

5 14. The semiconductor device according to claim 13, wherein said shared circuit is an input-output interface circuit for an external equipment.

15. The semiconductor device according to claim 13, wherein said shared circuit is a power supply circuit.

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16. The semiconductor device according to claim 13, wherein said shared circuit is an electrostatic protection circuit.

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17. A method of fabrication of a semiconductor device, comprising the steps of:

die bonding of a plurality of semiconductor chips on a substrate;

forming of an insulation film on said substrate, wherein said plurality of semiconductor chips is incrustated in said insulation film;

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forming of a connection hole reaching a semiconductor chip of said plurality of semiconductor chips on said insulation film; and

forming of wiring on said insulation film, wherein said wiring is connected to said semiconductor chip through said connection hole.

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18. The method of fabrication of a semiconductor device according to claim 17, further comprising the steps of:

forming of an upper layer insulation film on said insulation film, wherein said upper layer insulation film covers said wiring;

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forming of a connection hole reaching said wiring, on said upper layer insulation film; and

forming of an electrode on said upper layer insulation film, wherein said electrode is connected to said wiring through said connection hole.

19. The method of fabrication of a semiconductor device according to claim 17, wherein said substrate is a semiconductor wafer.

5 20. The method of fabrication of a semiconductor device according to claim 17, wherein

said die bonding of said plurality of semiconductor chips on said substrate comprises die bonding of each said semiconductor chip on said substrate, wherein each said semiconductor chip is set so as to float on an
10 adhesive resin applied on said substrate.

21. The method of fabrication of a semiconductor device according to claim 17, wherein

after said step of forming said wiring, said substrate is removed from
15 said semiconductor chip and said insulation film.